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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,529	03/10/2004	Dean Menchaca Rivera	42526-3600	7236
21611	7590	05/25/2006	EXAMINER	
SNELL & WILMER LLP 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			NGUYEN, TUAN DUC	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/798,529	Applicant(s) RIVERA ET AL.	
	Examiner Tuan D. Nguyen	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/10/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 15-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 recites the limitation "the top plate" in page 11 lines 3 and 7.

There are two top plates claimed and which one it refers to?

Claim 15 recites the limitation "a first and second" in page 11 lines 5.

What it refers to?

Claim 15 recites the limitation "the second end" in page 11 line 6.

There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "first end" in page 11 line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "the first end" in page 11 line 2. There is insufficient antecedent basis for this limitation in the claim.

Since there are too many indefiniteness terms in the claims, it would be a burden on the examiner to list all. Therefore, applicant's corporation for thoroughly revising the claims would be highly desirable for speeding up the processing of this application.

Since there are too many indefiniteness terms in the claims, it would be a burden on the examiner to list all. Therefore, applicant's corporation for thoroughly revising the claims would be highly desirable for speeding up the processing of this application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent number 6,373,959 (Masuda et al).

Regarding claim 1, Masuda et al discloses a transducer for converting electrical energy into mechanical energy, the transducer comprising: a top portion (10,20,26) of a housing having a circumference and a height adapted to flex in a controlled manner; a bottom portion (30, 24) of a housing having a circumference and a depth adapted to be rigid and stationary with respect to the top and supporting the top along the circumference of the top and bottom portions when the top and bottom portions are placed in arrangement to define an enclosure; and a

conductive coil (23) positioned between the top and bottom portions of the housing, to receive electrical signals and cause elastic deflections of the top in response to currents in the conductive coil caused by the electrical signals.

Regarding claim 12, Masuda et al also shows the bottom portion is circular and has a flat bottom (see figure 1).

Regarding claim 13, Masuda et al discloses wherein the bottom portion further comprises a plurality of fins (31a, 31b) attached to the flat bottom.

Regarding claim 14, Masuda et al also shows wherein the conductive coil is attached to the bottom portion of the housing (see figure 1).

Regarding claim 15, Masuda et al discloses wherein the conductive coil comprising: a bottom plate (24) physically attached to the inside of the housing bottom portion, the bottom plate having a recess; a magnet (25) adapted to fit within the recess of the bottom plate; a top plate; a top plate (26) with a circular aperture through its symmetrical center, attached to the bottom plate; a pole cap (22) adapted to fit within the circular aperture in the top plate; and a voice coil (23) having a first and second end and a diameter smaller than the circular aperture of the plate adapted to oscillate with the second end in the space between the pole cap and the circular aperture of the top plate.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-11 and 16- 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent number 6,373,959 (Masuda et al).

Regarding claims 2, 6, 7, Masuda et al does not disclose the top portion has a six sided hexagonal shape with a flat top.

However, Masuda et al does teach the top portion has three sided shape with a flat top and does not restrict to a specific sided shape.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the shape with a flat top for a particular application.

Regarding claim 3, Masuda et al also shows the top portion has a circular aperture in the flat top (see figure 1).

Regarding claims 4, 9, 11, and 20, Masuda et al further discloses a top cap that fits over the circular aperture in the top portion (10).

Regarding claim 5, Masuda et al discloses wherein the top portion has a ring (27) in the flat top adapted to control the flexing of the top portion.

Regarding claims 8, 10 and 21, Masuda et al dose not disclose gluing and a bolt.

However, gluing and a bolt are well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use these well known materials for easily assembly.

Regarding claims 16-19, Masuda et al does not disclose a spider and a voice coil has apertures therein for dissipating heat generated by the conductive coil.

However, a spider and a voice coil has apertures for cooling are well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use these well known materials for cooling a transducer and easily assembly.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan D. Nguyen whose telephone number is (571) 272-8163. The examiner can normally be reached on M-F 6:30-3:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499.

Art Unit: 2614

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TDN
5/18/06



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